

1 49. A method for forming an electrical structure; comprising:
2 providing a dielectric core;
3 helically winding a conductive wiring circumferentially around the dielectric core;
4 forming an outer dielectric jacket around the conductive wiring; and
5 cutting at an angle to an axis of the dielectric core, through the dielectric jacket and
6 through the conductive wiring and through the dielectric core, at two locations along the axis,
7 leaving a conductive button between the two location as having a first end and a second end,
8 wherein the conductive wiring terminates in at least two end contacts at the first end, and wherein
9 the conductive wiring terminates in at least two end contacts at the second end.

1 50. The method of claim 49, wherein the helically winding includes braiding.

1 51. The method of claim 49, wherein the helically winding includes serving.

1 52. The method of claim 49, wherein the helically winding includes helically winding in no more
2 than one rotational direction, and wherein the one rotational direction is selected from the group
3 consisting of a clockwise direction and a counter clockwise direction.

1 53. The method of claim 49, wherein the helically winding includes helically winding a portion
2 of the conductive wiring at a helical angle between about 30 degrees and about 60 degrees with
3 respect to an axis of the button.

1 54. The method of claim 49, wherein the cutting includes cutting through a node of two wires of
2 the conductive wiring.

1 55. The method of claim 49, further comprising coating the at least two end contacts of the
2 conductive wiring at the first end of the button with a noble metal.

1 56. The method of claim 49, wherein the cutting includes cutting by laser.

1 57. The method of claim 49, wherein the cutting includes cutting by electrical discharge
2 machining (EDM).

1 58. The method of claim 49, further comprising forming axial grooves along an outer surface of
2 the dielectric core.

1 59. The method of claim 49, further comprising forming an axial through hole at a radial center
2 of the dielectric core.

1 60. A method for forming an electrical structure, comprising:

2 providing a dielectric core;

3 helically winding a conductive wiring circumferentially around the dielectric core;

4 forming an outer dielectric jacket around the conductive wiring;

5 cutting at an angle to an axis of the dielectric core, through the dielectric jacket and

6 through the conductive wiring and through the dielectric core, at two locations along the axis,

7 leaving a conductive button between the two location as having a first end and a second end,

8 wherein the conductive wiring terminates in at least two end contacts at the first end, and wherein

9 the conductive wiring terminates in at least two end contacts at the second end;

10 providing a first substrate and a second substrate;

11 mechanically and electrically coupling the at least two end contacts at the first end of the
12 button to a conductive pad of the first substrate; and

13 mechanically and electrically coupling the at least two end contacts at the second end of
14 the button to a conductive pad of the second substrate.

1 61. The method of claim 60, wherein the first substrate includes a printed wiring board, and

2 wherein the second substrate includes an electronic module.

1 62. The method of claim 60, further comprising:

2 after the cutting, placing the button in a dielectric place holder such that place holder
3 holds the button in place; and